

硫脲衍生物受体的阴离子识别研究

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摘要 设计、合成了双支链结构的萘基硫脲衍生物。利用吸收光谱和¹H NMR表征了该化合物与不同链长的二羧酸盐阴离子的相互作用。实验结果表明,阴离子与主体化合物间通过多重氢键形成配合物、导致萘基硫脲衍生物光谱发生变化。测定了配合物的稳定性,发现衍生物对二羧酸盐阴离子的选择性取决于二羧酸阴离子链的长短。并根据实验结果提出了可能的配合物结合方式。

关键词 [硫脲类](#) [受体](#) [阴离子](#) [辨识](#) [二羧酸盐](#) [羧酸盐](#)

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A study on anion recognition by a naphthyl-thiourea derivative

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Abstract A piperazine N,N'-bis naphthyl thiourea derivative was designed and synthesized. The interactions of this compound with different dicarboxylate anion were characterized by UV- vis and ¹H NMR spectroscopy. Results indicated that the complex formation through the hydrogen bond interactions between anion and the title compound induced variation of absorption spectrum. The stability constants were determined in this work. It was found that the selectivity of dicarboxylate is dependent strongly on the chain length of anion. The complex model is also proposed according to the results obtained.

Key words [SULFOCARBAMIDES](#) [ACCEPTOR](#) [ANION](#) [IDENTIFICATION](#) [CARBOXYLATES](#)

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